

SYSTEM AND METHOD FOR A GENERALIZED PACKET HEADER SUPPRESSION MECHANISM

ABSTRACT OF THE DISCLOSURE

A system and method for a generalized packet header suppression mechanism is described. This mechanism is implemented via a descriptor table. An exact copy of the descriptor table is stored in both the sender and receiver of packets via a communication medium. Entries in the descriptor table provide the information necessary to both suppress and expand the headers of well-known packets. The sender of the packet uses the descriptor table to suppress the packet header prior to transmitting the packet over the communication medium. When the packet reaches the receiver, the receiver uses the descriptor table to expand or reconstruct the packet header. This procedure results in less bandwidth required to transmit well-known messages because known header data is not transmitted via the medium, thereby not wasting bandwidth. The suppression mechanism allows the complete suppression of the header of a packet (as opposed to the traditional payload suppression) by a shorter message descriptor. Thus, this mechanism allows a common framework to support several protocols in the same communication medium.